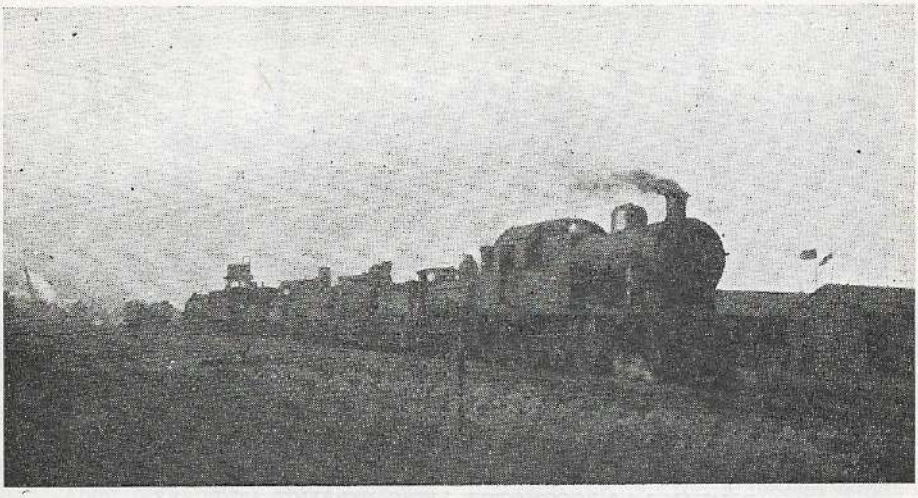


DUTCH, BRITISH AND BELGIAN LOCOMOTIVES AT ST. OMER

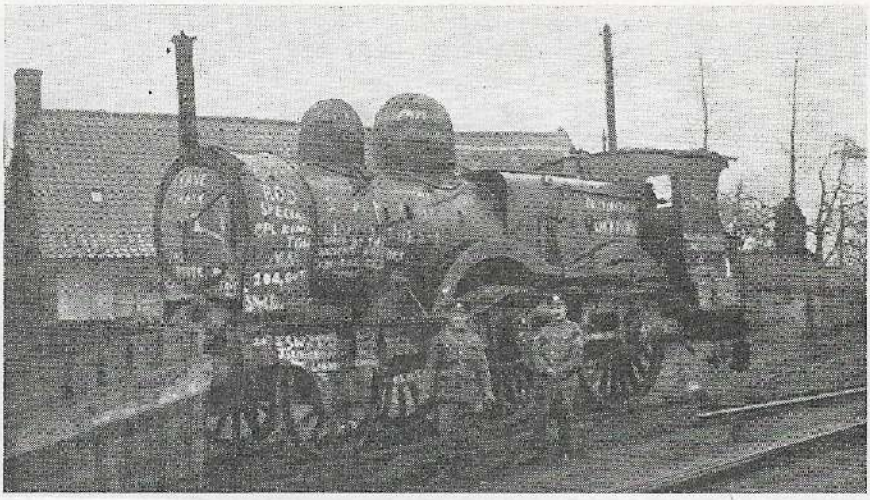
Footplate Work with the R.O.D. in France

By "LOCO"

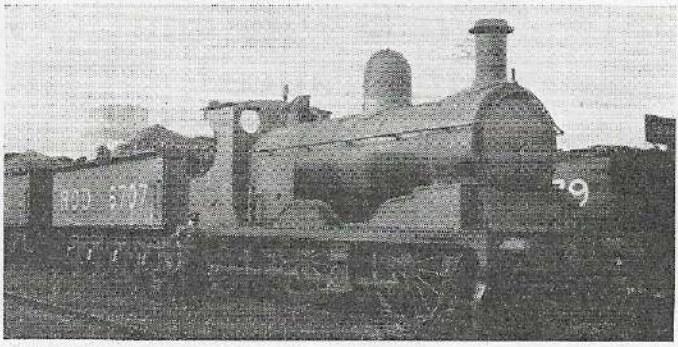
IN attempting this supplement to Mr. Sherrington's excellent "History of the Railway Operating Division," the writer feels conscious of his limitations. No more is possible than the merest glimpse of the work of thousands of men engaged in a gigantic task, which took them and their engines to Cherbourg in the West, Cologne in the East, and Paris, or possibly further, in the South, leaving out of account the other theatres of war.

The R.O.D. was unique in every respect, for just as the stock employed came from so many sources, so did the *personnel*. Recruiting for the Corps appears to have begun in 1915, on quite a small scale at first, but, in addition, about May, 1916, commenced the transfer of railwaymen, especially footplatemen, from other units, until most of the men with experience of railways or steam engines appeared to have come to the R.O.D. The result was that every railway and regiment appeared to be represented, together with railwaymen from most parts of the world, the latter either as transfers, or in the separate operating units provided by Australia, Canada, and South Africa.

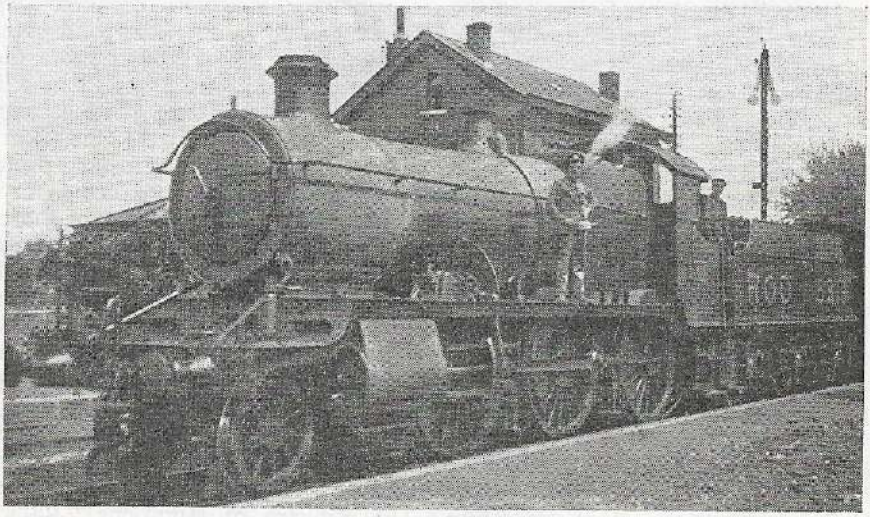
As Mr. Sherrington remarked, most of the 0-6-0 tender engines sent out were unsuitable for the heavy work, owing to the weight and high capacity of Continental rolling-stock, and its greater width, which made shunting difficult owing to the narrow footplates of these engines. Screw couplings on all wagons, standardised abroad, also made it more difficult to move a train from rest than a loose-coupled train over here. Of these engines, the North British were the best and strongest, and the greater protection afforded by their cabs earned them warm appreciation. The designer of those supplied by the Caledonian Railway would have had a shock could he have heard the comments on their arrangement of reversing-lever on one side of the footplate and steam brake-valve on the other! Great Western 2-6-0's were special favourites with G.W. men, as with most others. Of the 0-8-0's, the N.E. engines were easily first favourites, and their neat steam reversing-gear came in for praise. The Ministry of Munitions 2-8-0's were



BELGIAN 2-4-0 LOCOMOTIVE LYING DERELICT AT BORRE
Inscriptions include "Leave Train," "Built by Moses," and "Destination Unknown"



LANCASHIRE & YORKSHIRE 0-6-0 LOCOMOTIVE, R.O.D. No. 6707



GREAT WESTERN 2-6-0 LOCOMOTIVE, R.O.D. No. 5319

much preferred to the American or Australian engines of this type which came out earlier. All classes of tank engines won approval, the ten Kerr-Stuart 0-6-0's and the Dutch 4-6-4's being the most popular. The latter have the most comfortable and commodious cab the writer has ever seen, and the doors enclosing the top of the coal bunker are an advantage. All three American types of tank engine were very strong, quick, and convenient.

The 0-6-0 Belgian tender engines in use were of two very distinct classes. The modern, closely following our own Caledonian Railway design, some with slide-valves and others with piston valves, were good engines, but the "Souvenirs," as we termed them, although very strong, evidently belonged to a much earlier period. Their only power-brake was the counter-pressure arrangement, described on page 439 of the June issue, but R.O.D. men preferred the well-tried remedy of reversing the engine. The four-wheeled tender was fitted with a hand-brake. Their huge chimneys, sometimes square, excited comment, as did the large fire-grate, the level of which was above the footplate and close to the tubes. Two large fire-doors, when open, exposed the whole of the grate. Their very large cabs provided ample opportunity for drying the washing, which had to be done somehow!

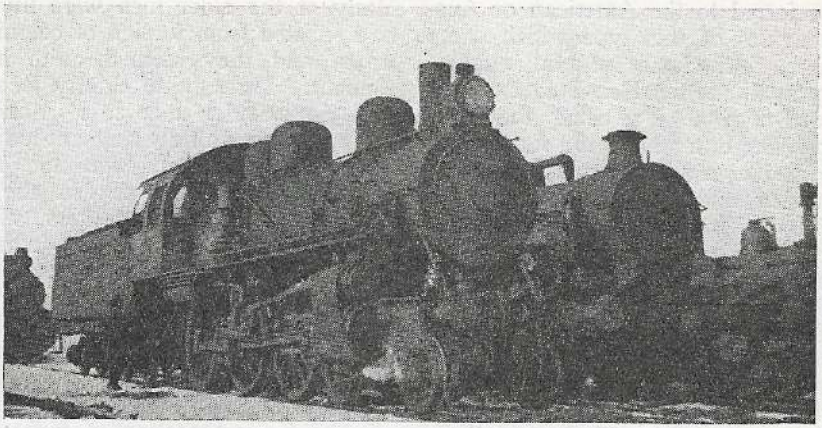
All these engines first came to Audruicq, the small town between Calais and St. Omer, where their spare parts filled an enormous stores. Audruicq always remained the clearing-house for engines and men, and here, too, was a large munition dump and the chief storekeeper's park. Manning the large number of shunting engines in these yards was the first work undertaken. Most of the men, the writer included, had little footplate experience; many had none at all, and these shunting engines were largely used to give experience.

Although damage to engines and stock was sometimes caused by inexperience which would not be tolerated at home, it is pleasing to record that, with few exceptions, the work was done extremely well, and many who had not reached the driving stage at home drove all sorts of engines with all classes of trains, and frequently received congratulations. Many of the older men were those who had enlisted from foreign or colonial railways, and they seemed quite in their element. Three quite elderly locomotive men came under the writer's notice; one was the running sergeant-major at Audruicq, who had won the D.C.M. when on footplate work in the South African War, and two others, who had joined for a wager at Selby, must have been nearing 60 years of age.

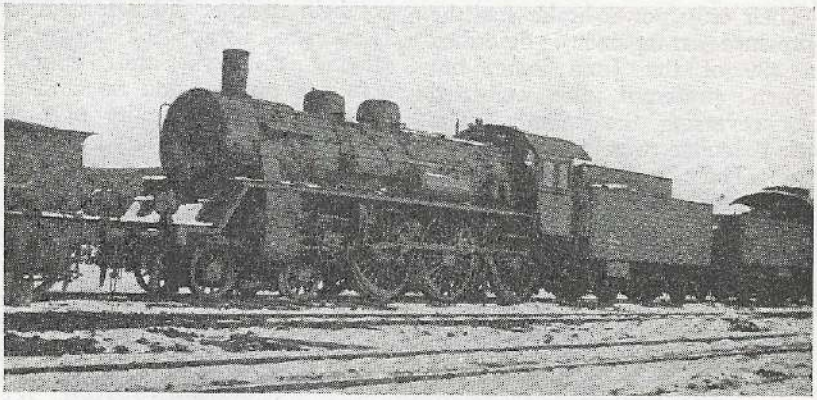
Our work was rendered difficult at first by reason of not "knowing" the engines, other than any from our home company, but experience quickly overcame this difficulty. No naked lights were allowed for preparation at night; engine pits were a rarity, and sheds were unknown. Much bad coal and water did not help, neither did a foreign language. There was always the danger of aerial attack, railways and dumps being favourite targets, and no emphasis need be laid on the difficulty of maintaining steam without allowing the light of the fire to be seen. The men on engines in forward areas usually rigged up an extension of the usual miserable English cab, and used a tarpaulin to cover the whole. The noise of the engine in running did not allow the distinctive drone of German aircraft to be heard, but this disadvantage was discounted in later days because the density of anti-aircraft batteries and searchlights over the whole country gave a ready indication when attack was expected.

Shelling by the huge projectiles of long-range guns also gave railways an uncomfortable time for miles to the rear, and when following up a retreat, delayed-action mines were a source of anxiety. Vigilance was the watchword, for in addition to the foregoing, all railways, including the French main lines, worked on the permissive system. Most of the military railways were hurriedly laid with sand ballast, and heavy rains contributed to derailments and broken intermediate drawgear.

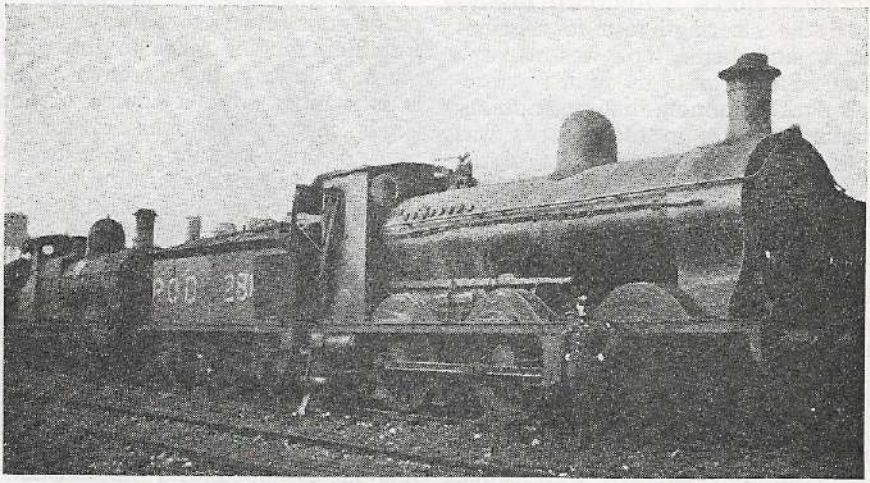
Signalling was by red or green flag or lamp, there being no fixed signals, at block-posts provided at intervals. The signalmen in charge were often in isolated places; their quarters were a small hut or dug-out equipped with the telephone. A written order to proceed was handed to



AMERICAN-BUILT 4-6-0 "SPIDER" LOCOMOTIVE



STANDARD PRUSSIAN 4-6-0 LOCOMOTIVE HANDED OVER TO BELGIUM AFTER THE ARMISTICE



BELGIAN "CALEDONIAN" 0-6-0 GOODS LOCOMOTIVE IN FRONT OF G.W.R. 0-6-0

the footplate tied to a hazel-branch made into a loop, and caught as are the single-line tablets at home. When a train was in the section ahead, the oncoming train would be stopped and the driver told how long before the preceding train had left. Following the practice of home railways, the guards were supplied with watches, but not the drivers. The French place the guard's van next to the engine, and on their lines the guard would hand the driver the order to proceed, after obtaining the sanction of the man at the semaphore block-post.

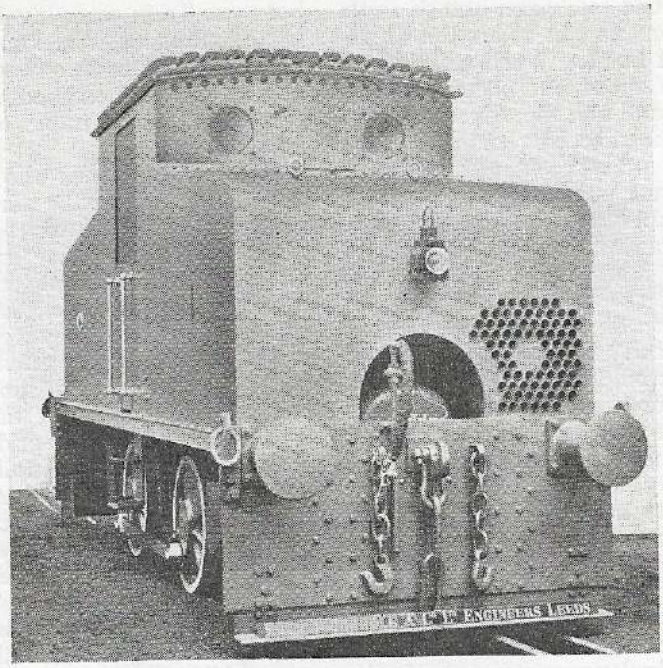
Each train would also be provided with one or more brakesmen, according to its weight and the nature of the route. These men rode in the caboose fitted to so many of their vehicles, and now a familiar sight in many parts of this country on the foreign wagons coming over by the Harwich train ferry. One of these was always at the tail of a train, which did not stop at inclines for pinning-down brakes as here, but depended on these two or more brakesmen using the brake of the vehicle in which they rode. This was an intensely cold job in winter, and most of the brakesmen contrived to scrounge a brazier to keep their feet warm, as did the troops when travelling in the 20-ton vans, all of which had sliding doors. Many will recollect the suffocating fumes which accompanied the quest for a little warmth.

Questions of seniority, rosters and overtime gave no trouble; such considerations were non-existent. Shunting engines were in continuous service, taking coal and water as required, and were cleaned by the crews as opportunity offered. The men worked two shifts of 12 hours each, usually commencing at 4.0 a.m. and 4.0 p.m., and much longer hours on Sundays, when the shifts were reversed. Pressure of work fluctuated with the demand for munitions or material from the yards, and the manning of the trains was on the principle of " first in, first out." Except on occasions of extreme pressure this allowed a good rest after each trip. Meals were only obtainable at the recognised times by day, but when one was asleep a comrade could be relied upon to have set some food aside for the sleeper. Indeed, the comradeship of the army was the bright spot of an otherwise sorry business. Train work involved long hours —60 continuous were known, and sometimes as long as two weeks away from home depôt. The caboose system of two crews on each train was eventually adopted.

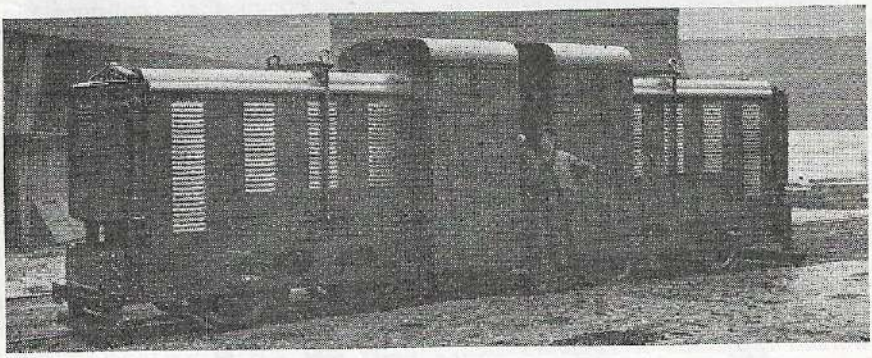
French enginemen, who often acted as our pilotmen, won the admiration of our men for the courteous and efficient manner in which they carried out the duty. A share-out of their coffee was usually their first act, and our tin of " bully," to which they were very partial, would then change hands. They liked the neat outline and simplicity of our engines, but could not understand why we had not the drop grid in the grate, which worked so successfully with them.

When the H.Q. train was being worked from Cambrai to Audruicq one day, a piece of wood nailed to a temporary overbridge struck the whistle on the cab roof, breaking its pillar close to the firebox top and well inside the cab. The crew showed great pluck in getting to the injectors in the scalding steam, and managed to plug the pillar with wood wedged to the cab roof for security. With the help of an assistant engine they continued the journey for another 14 hours, with 100 lb. of steam to heat the train and help a little.

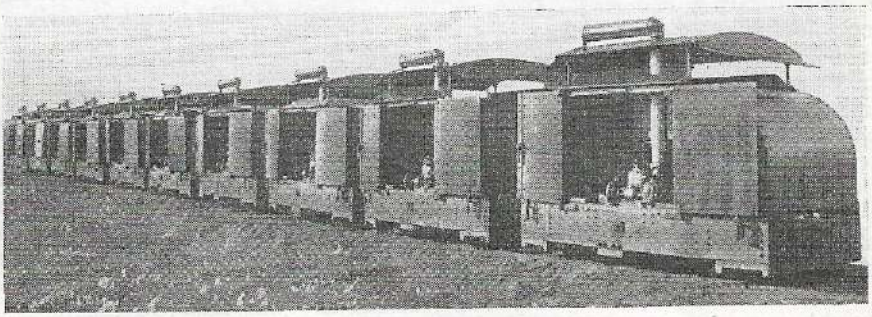
Mr. Sherrington remarked on the only steam engine that was captured by the enemy—M.R. No. 2717. When the British advanced on Cambrai in October, 1917, the Peronne-Cambrai Railway, which was quickly repaired, ran up the centre of the new salient. Early on the morning of the German counter-attack (November 30) No. 2717 took a working party and several wagons of chalk to fill a crater near Marcoing. Their progress was delayed by very heavy shelling, and before long retiring infantry advised them of " Jerry's " close approach. Ordered back, they went some 3 miles, the engine being finally left near Gouzeaucourt level crossing, with one injector working and the other tender water-valve open. The Germans were then in sight on the flank. After the Armistice her driver, J. Woodhouse, Oxenholme, was working a supply train to Germany, and at Charleroi was surprised to find his old steed; she was included among a batch of engines handed back by Germany.



180-H.P PETROL ENGINE, STANDARD GAUGE
Built by Manning, Wardle & Co. Ltd.



PETROL-ELECTRIC TRACTORS, 60-cm. GAUGE



40-H.P. PETROL TRACTORS

The cab had been extended and other alterations made, as shown in the photograph appearing in the January issue.

Many awards were made for bravery, mostly in connection with the anxious times in 1918. The first appears to have been the D.S.O. to Lt.-Col. V. M. Barrington-Ward, now of the L. & N.E.R., and a D.C.M. to the driver who accompanied him on an engine into the exploding munition dump at Audruicq to rescue men who had taken refuge in dug-outs. After previous unsuccessful raids, the dump was hit about 1 a.m. on July 21, 1916, and the resultant explosions and fire, which caused the evacuation of the whole neighbourhood for two days, left an indescribable scene. Many thousands of tons of ammunition were lost, and some 400 railway wagons alongside the dumps were blown in fragments over great distances, or burnt out. This did not deter the British, for the dump was rebuilt and extended, with the additional protection of sand-bag walls. This sand-bag work was first done by the R.O.D. men, who were waiting for coming developments to employ them on railway work, and to the writer, who took part, it proved about the most monotonous job he has yet encountered, and when the completion was handed over to the Chinese Labour Corps (who came to France all smiles), they became so tired of the job that various inducements had to be offered them.

The Chinese had a special knack of moving heavy and awkward loads in the easiest way. One recalls their insistence on their own methods, the sand-bag suits they made for engine-cleaning, and their improvised steel helmets of tea-dixies or biscuit-tins during air raids.

Of the trying times early in 1918 whole volumes could be written, but two illustrations must suffice. Going to Etricourt on the day before Good Friday to remove the Hospital train, when the Germans were sweeping forward, a North Eastern driver, who received the D.C.M., saw his fireman, who had left the engine to fill his water-bottle, killed by a shell. After taking the train to "Plateau," near Meault, he again went forward to remove some wagons of ammunition, and had his engine derailed in the dump, but returned with the wagons after removing a side-rod that was bent in rerailing his engine.

On the frightful night of March 25, 1918, when the important strategic railway centre of St. Pol was heavily bombed, a train of troops going on leave was subjected to aircraft machine-gun fire on its way down from Aubigny, killing two and wounding several. On arrival at St. Pol the train was ordered back, as all leave was cancelled. On the return of the engine (G.W. No. 5325) to Tachincourt depôt, near St. Pol, a bomb was dropped near, but the crew were fortunately scrounging tea at the cookhouse at the time. Nineteen holes were made in the tank and one in the injector delivery pipe, but all of them were plugged with wood and held for the remainder of her service. Unlike the French and Germans, the British were late in placing power on the 2-ft. gauge light railways, being content with small hand-worked trollies, but the mud following the Somme offensive of 1916 made the use of power essential. From the 20-H.P. Simplex petrol tractors and Hudson 0-6-0 steam engines which came out late in 1916, running on light track, rapidly grew the thousands of miles of heavier-section rails, laid on wooden sleepers, and power units ranging from the 20-H.P. petrol, and 40-H.P. petrol and petrol-electric tractors, to the comparatively large 4-6-0 American-built steam engines. The total number of narrow-gauge locomotives of all types ran well into four figures. Many footplatemen served on these lines, and contributed to the wonderful and dangerous work they did, but as the R.O.D. connection terminated early in 1917, on the formation of a separate Light Railway Operating Division, this brief note must suffice.

The R.O.D. retained control of two interesting examples of petrol-engined vehicles. The first, 35-H.P. lorries built by the Caledon Motor Company, of Glasgow, were usually attached to railway construction companies and did useful work in the conveyance of men and materials on the rails. The others were the 26-ton 0-4-0 armoured engines, supplied by Manning, Wardle & Co., of Leeds (absorbed by Kitson & Co. in 1927). They were first manned by men

with experience of internal-combustion engines, who were later formed into a repair staff, when the Australians took up their running, and when, early in 1918, the Australians returned to their own unit, by English steam men who had had any experience with petrol engines, including the writer. Six engines came out in 1916 and four in 1918, but more were built, for one of the last series, with a later number, was seen by the writer at Llanharan, South Wales, in 1920, when the Powell, Duffryn Colliery Company were sinking for their new pit adjoining the G.W.R. main line. Inspection showed that it had failed with the same troubles which frequently put the engines out of action in France, and a steam engine from a nearby colliery was deputising.

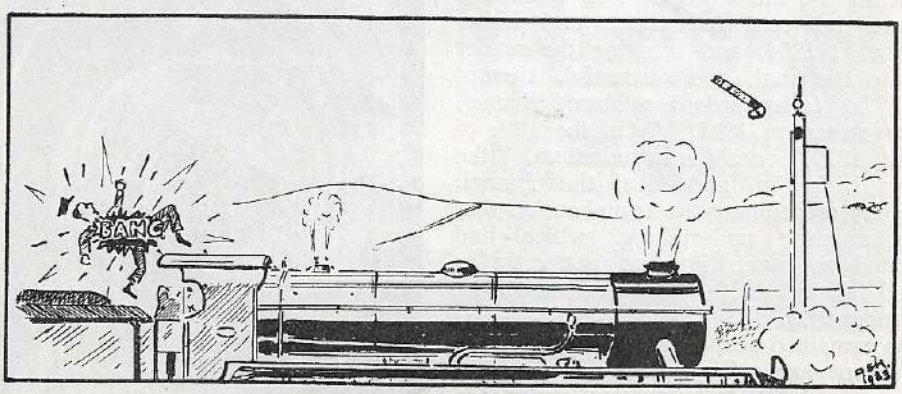
The chief use of these locomotives was the movement of rail-mounted guns in forward areas, together with their ammunition supplies, but the liability to failure did not enhance their value. Their 180-H.P. engines were of the Thornycroft six-cylinder marine type, with reversible cam shaft, and gave little trouble; but a compressor worked off the main shaft, to supply two independent reservoirs with compressed air, at 200 lb. per sq. in., for starting purposes and operating the Westinghouse brake and tubular whistle, frequently smashed. Had an auxiliary motor been provided for the purpose, as on the new L.M.S. engine, described in the March issue of *The Railway Magazine*, many failures might have been avoided. The air pressure was too low to turn the engine if any ignition trouble had not been located and remedied after a few admissions of air and it was then necessary to obtain the assistance of a steam engine in order to start up. The three-speed gear drive through the medium of a large plate clutch also contributed to occasional trouble, while the short radius of gun spur lines sometimes broke the bevel-case supports on the driving axle. A 9·2 naval gun, weighing 100 tons, was a fair load on a gradient. Petrol consumption was about 10 gallons per hour, so that the comparative economy of the present Diesel types, using a cheaper fuel oil, will be appreciated. The experience convinced the writer that for flexibility the steam engine will be hard to beat.

The R.O.D. produced at the Audruicq depôt one of the finest concert parties in France, and the non-stop laughter of this, and other parties, did more to assuage our trials than can ever be properly assessed. For the thousands of men who had to remain at Audruicq for so long after the Armistice, a little variation was provided by excursions on Sundays for any who wished to go. The trains consisted of about 50 box-vans, with a cook and the necessaries for making tea. The first trip, intended for Ypres, came to a premature end, for in approaching St. Omer, some 8 miles from the start, the Canadian driver overran the stop signal, collided with a train of tank wagons loaded with guns that was crossing his path from the yard, and narrowly escaped going into the canal with his engine. As it was, his cylinder was knocked off, and both main lines were blocked for some hours.

The first British train to enter Cologne was Lord Haig's Headquarters train, with one of the American-built 4-6-0 "Spiders" at the head (Driver C. Webster, Carmarthen). The Dutch tank engine which had previously been with the train at Cambrai had not the coal and water capacity for the Cologne journey, and Col. Lynde would have attached one of the G.W.R. 53XX class, had they been fitted with the Westinghouse instead of the vacuum brake. The train left the headquarters town of Montreuil, near Etaples, at 6 p.m. on December 14, 1918, and reached Cologne to schedule at 2.0 a.m. on December 16, returning to Montreuil the same afternoon. Progress was slow across the old battlefield and four coaches became derailed near Lille. Fortunately, the important part of the train remained on the rails, and was drawn back, recoupled to the front portion, and the journey continued while Lord Haig and staff were asleep.

The story is appropriately concluded by an extract from a lengthy communication sent to us by ex-Sapper J. Harries, of the R.O.D., who was detailed to railway work in the occupied area of Germany after the cessation of hostilities. "I went firing with a chap off the Highland Railway," he writes, "and soon afterwards we were handed a G.W.R. 0-6-0, No. 2531, and, coupled up to an old Caledonian 0-6-0,

we took the staff train into Cologne, ours being the first British engines to cross the Rhine, and opened a depôt outside the city, at Nippe. On arrival near the Nippe engine shed, we backed off our train, and ran ahead on to an electric traversing platform capable of holding six locomotives. After a sideway movement, we were run off on to the shed roads, under the overhead coal stage; there was one ' stop ' indicator for coal, another one farther on for coke, and a third for patent fuel, and all on a chute system, the fuel being carried by an endless aerial chain and bucket system from coal sidings close by. The fumes and smoke from the huge round shed were drawn by funnel clamps up to a single flue and into a high smoke-stack, which contrasted favourably with the low chimneys and smoke clouds of many British sheds. Slipper baths and a full-sized swimming bath were located at the far end of the shed, all done in white tiles; and how we enjoyed ourselves in them! There were electric turn-tables and small trams running in the pits and alongside the firedropping pits, for smokebox, firebox and ashpan ashes. These were hooked on to an electric crane and hauled up above, to tip down a long chute into wagons. Everything seemed a considerable advance on the old-fashioned shovel system of ours. Around the engine pits were hydrants which were not then in use, owing to the shortage of oil, but it was explained that during normal times they were for washing down the wheels and the framing of engines by compressed air and paraffin. I was then attached as fireman to a Londoner named Bert King, and we used to run to Aix-la-Chapelle and the surrounding districts of Cologne with a German pilotman, late of the German Air Force, who had taken part in several Zeppelin raids over England, and who showed us round the interesting parts of Cologne during our spare time. Every Sunday the Rhine pleasure steamers were free to all British troops. Old G.W.R. 2531 was a source of interest to the German locomotive men ; the young shed boys kept the front end and all her brass and copperwork glittering. About the middle of March, 1919, we coupled up to the old Caledonian engine, and pulled out with the staff train, leaving on a Sunday afternoon. We stopped the night at Liége, proceeded on next day to Mons, where we coaled the tender from an old German coal dump ; we had to screen the coal owing to the presence of small black bombs which had been mixed with it by the retreating German troops. We arrived at Audruicq early on the Tuesday morning, and were employed next day stripping the engine for transport to England. After a parade and appreciation of our services by the C.O. we were amongst the crowd demobilised at Fovant on April 29, 1919."



"THE DRIVER BLEW UP AND THE SIGNAL CAME OFF—"

Extract from a letter received by the S.D.S.O. as interpreted pictorially in the *Southern Railway Magazine.*

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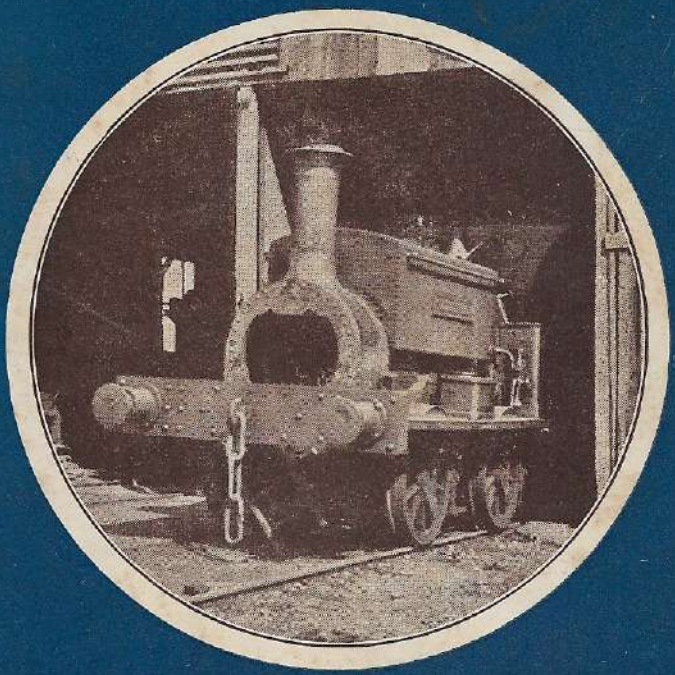

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